# 6) IMPROVEMENTS AND ASPHALTING TO ROADS AND DRAINS AT VEMANNA LAYOUT AND SURROUNDING AREAS IN WARD NO. 10 VIDYARANYAPURA SUB DIVISION

**BRUHAT BANGALORE MAHANAGARA PALIKE**

**PREPARATION OF DPR FOR PACKAGE NO. 04**

**(PACKAGE CONSISTS OF 28 WORKS IN WARD NO 10 AND WARD NO 11)**

**NAME OF WORK : IMPROVEMENTS AND ASPHALTING TO ROADS AND DRAINS AT VEMANNA LAYOUT AND SURROUNDING AREAS IN WARD NO. 10 VIDYARANYAPURA SUB DIVISION.**

| Sl.No. | Description of work | Mesurement | | | | | Qty | Rate | Amount |
|---|---|---|---|---|---|---|---|---|---|
| | | Unit | No | L | B | D | | | |
| 1 | KSRB 2-1.1: Earthwork in surface excavation in ordinary soil for leveling and lowering the ground manually (other than foundation of buildings, culverts, roads drains and trenches of pipe line and cables) and removing the excavated stuff to a distance not exceeding 50m and lift up lift 1.5, excavated surface leveled and neatly dressed disposed earth to be leveled after breaking of clods and neatly dressed as per specifications.Specification. No. KBS 2.1(a)/2.3.1(P.No.5-I.No.2.1) | | | | | | | | |
| | **Desilting drain** | | | | | | | | |
| | **DODDABOMMAS ANDRA** | | | | | | | | |
| | 7th Cross Road vemanna layout | Cum | 2 | 205.80 | 0.70 | 0.40 | 115.25 | | |
| | 1st Cross Road | Cum | 2 | 185.50 | 0.65 | 0.40 | 96.46 | | |
| | 2nd'B Cross Road | Cum | 2 | 64.70 | 0.70 | 0.40 | 36.23 | | |
| | **BEL 2ND BLOCK** | | | | | | | | |
| | 4th Main Road 2nd Cross Road | Cum | 2 | 303.50 | 0.80 | 0.40 | 194.24 | | |
| | Basic rate | | | | | | | 157.00 | |
| | Area weightage 6% | | | | | | | 9.42 | |
| | Total | | | | | | **442.18** | **166.42** | **73587.60** |
| 2 | Removing B.S.slab of Drain and stacking.(P.No.25-I.No.5.32) | | | | | | | | |
| | **Closed Drain** | | | | | | | | |
| | **Cover Slab** | | | | | | | | |
| | **DODDABOMMAS ANDRA** | | | | | | | | |
| | 7th Cross Road vemanna layout | Sqm | 2 | 205.80 | 0.70 | | 288.12 | | |
| | 1st Cross Road | Sqm | 2 | 185.50 | 0.65 | | 241.15 | | |
| | 2nd'B Cross Road | Sqm | 2 | 64.70 | 0.70 | | 90.58 | | |
| | **Open Drain (Sides & Bottom)** | Width=Perimeter of Drain in U Shape | | | | | | | |
| | **BEL 2ND BLOCK** | | | | | | | | |
| | 4th Main Road 2nd Cross Road | Sqm | 2 | 303.50 | 1.80 | | 1092.60 | | |
| | **Sub Total** | | | | | | **1712.45** | | |
| | **Consider 5% Qnty for Removing** | | | | | | **85.62** | | |
| | Basic rate | | | | | | | 62.00 | |
| | Area weightage 6% | | | | | | | 3.72 | |
| | Total | | | | | | **85.62** | **65.72** | **5627.11** |
| 3 | Removing and refixing stone slabs of drains and pointing in CM (1:3) (P.No.25-I.No.5.33) | | | | | | | | |
| | **Closed Drain** | | | | | | | | |
| | **Cover Slab** | | | | | | | | |
| | **DODDABOMMAS ANDRA** | | | | | | | | |
| | 7th Cross Road vemanna layout | Sqm | 2 | 205.80 | 0.70 | | 288.12 | | |
| | 1st Cross Road | Sqm | 2 | 185.50 | 0.65 | | 241.15 | | |
| | 2nd'B Cross Road | Sqm | 2 | 64.70 | 0.70 | | 90.58 | | |
| | **Sub Total** | | | | | | **619.85** | | |
| | **Consider 30% Qnty for Removing & Refixing** | | | | | | **185.96** | | |
| | Basic rate | | | | | | | 76.00 | |
| | Area weightage 6% | | | | | | | 4.56 | |
| | Total | | | | | | 185.96 | **80.56** | **14980.53** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 4 | Providing granite slabs of selected quality roughly dressed havinf a size of 7.5 cms thick and fixed in cement mortar (1:6) including fixing curing ete., complete.(P.No.25,I.No.5.31.1) | | | | | | | | |
| | **Closed Drain** | | | | | | | | |
| | **Cover Slab** | | | | | | | | |
| | **DODDABOMMAS ANDRA** | | | | | | | | |
| | 7th Cross Road vemanna layout | Sqm | 2 | 205.80 | 0.70 | | 288.12 | | |
| | 1st Cross Road | Sqm | 2 | 185.50 | 0.65 | | 241.15 | | |
| | 2nd'B Cross Road | Sqm | 2 | 64.70 | 0.70 | | 90.58 | | |
| | **Sub Total** | | | | | | **619.85** | | |
| | **Consider 5% Qnty for Refixing** | | | | | | **30.99** | | |
| | Basic rate | | | | | | | 628.00 | |
| | Area weightage 6% | | | | | | | 37.68 | |
| | Total | | | | | | 30.99 | 665.68 | 20631.09 |
| 5 | Providing granite slabs of selected quality roughly dressed havinf a size of 10 cms thick and fixed in cement mortar (1:6) including fixing curing ete., complete.(P.No.25,I.No.5.31.2) | | | | | | | | |
| | **Drain slab** | | | | | | | | |
| | **BEL 2ND BLOCK** | | | | | | | | |
| | 4th Main Road 2nd Cross Road | Sqm | 2 | 303.50 | 1.80 | | 1092.60 | | |
| | **Sub Total** | | | | | | **1092.60** | | |
| | **Consider 5% Qnty for Refixing** | | | | | | **54.63** | | |
| | Basic rate | | | | | | | 779.00 | |
| | Area weightage 6% | | | | | | | 46.74 | |
| | Total | | | | | | 54.63 | 825.74 | 45110.18 |
| 6 | KSRB 300-1 : Earthwork excavation by manual means in ordinary soil involving an average horizontal throw upto 2meters and an average lift upto 1.5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specifications.(P.No.142,I.No.19.1) | | | | | | | | |
| | **Road cutting portions** | | | | | | | | |
| | **DODDABOMMAS ANDRA** | | | | | | | | |
| | 1st Cross Road | Cum | 1 | 4.40 | 0.80 | 0.23 | 0.81 | | |
| | **BEL 2ND BLOCK** | | | | | | | | |
| | 4th Main Road 2nd Cross Road | Cum | 1 | 303.50 | 1.00 | 0.23 | 69.81 | | |
| | | Cum | 1 | 303.50 | 6.35 | 0.23 | 443.26 | | |
| | Basic rate | | | | | | | 82.00 | |
| | Area weightage 6% | | | | | | | 4.92 | |
| | Total | | | | | | 513.88 | 86.92 | 44666.13 |
| 7 | Lead for disposal of earth shall be payable at Carriage rates (Lead & Lift) by mechanical means including loading and unloading up to 15kms.(Refer Table. Page No.139) | | | | | | | | |
| | Considered same Qty vide I.No.1+I.No.6 | Cum | | | | | 956.06 | | |
| | Average Weight of Earth (1.28 Ton/cum, Basic rate Rs.2.5 Tonne/Km.) For 15 Kms = (2.5 x 1.28 x 15)/- | | 48.00 | | | | | | |
| | KSRRB M100-1 Add loading & unloading (P.No.130,I.No.17.1) | | 68.00 | | | | | | |
| | Total rate per Cum | | 116.00 | | | | | | |
| | Basic rate | | | | | | | 116.00 | |
| | Area weightage 6% | | | | | | | 6.96 | |
| | Total | | | | | | 956.06 | 122.96 | 117556.69 |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 8 | KSRRB M400-17.Providing,laying, spreading and compacting crushed stone aggregates of granite/trap/ basalt to wet mix macadam specification including pre mixing the Material with water at OMC in mechanical mix plant carriage of mixed material by tipper to site, laying in uniform layers with paver in sub-base/ base course on well prepared surface and compacting with vibratory roller to achieve the desired density. complete as per specifications.MORTH specification No.406(Page No.158,I.No.20.18) | | | | | | | | |
| | **Road cutting portions** | | | | | | | | |
| | **DODDABOMMAS ANDRA** | | | | | | | | |
| | 1st Cross Road | Cum | 1 | 4.40 | 0.80 | 0.23 | 0.81 | | |
| | **BEL 2ND BLOCK** | | | | | | | | |
| | 4th Main Road 2nd Cross Road | Cum | 1 | 303.50 | 1.00 | 0.23 | 69.81 | | |
| | | Cum | 1 | 303.50 | 6.35 | 0.23 | 443.26 | | |
| | Basic rate | | | | | | | 1668.00 | |
| | Area weightage 6% | | | | | | | 100.08 | |
| | Total | | | | | | **513.88** | **1768.08** | **908574.50** |
| 9 | KSRRB 500-1.Cleaning the existing WBM Road surface including removing of binding materials and other foreign matter with wire brushes and small picks sweeping with brooms or soft brushes and finally dusting with old gunny bags and bar or compressed air to receive bituminous treatment including cost of all materials, labhour, HOM of machineries complet as per specifications.(P.No.161,I.No.21.1) | | | | | | | | |
| | **Road cutting portions** | | | | | | | | |
| | **DODDABOMMAS ANDRA** | | | | | | | | |
| | 1st Cross Road | Sqm | 1 | 4.40 | 0.80 | | 3.52 | | |
| | **BEL 2ND BLOCK** | | | | | | | | |
| | 4th Main Road 2nd Cross Road | Cum | 1 | 303.50 | 1.00 | | 303.50 | | |
| | | Cum | 1 | 303.50 | 6.35 | | 1927.23 | | |
| | Basic rate | | | | | | | 13.00 | |
| | Area weightage 6% | | | | | | | 0.78 | |
| | Total | | | | | | **2234.25** | **13.78** | **30787.90** |
| 10 | KSRRB M 500-6, Providing and applying primer coat with SS bitumen emulsion on prepared surface of granular Base such as WBM WMM including clearing of road surface and spraying primer at the rate of 0.60 kglsqm using mechanical means complete as per specifications. As per MORTH specification clause No. 502 (P.No.161, I.No.21.6 ) | | | | | | | | |
| | Considered same Above Qty | Sqm | | | | | 2234.25 | | |
| | Basic rate | | | | | | | 26.00 | |
| | Area weightage 6% | | | | | | | 1.56 | |
| | Total | | | | | | **2234.25** | **27.56** | **61575.79** |
| 11 | KSRRB M500-17. Providing and laying dense graded bituminous macadam using crushed aggregates of specified grading, premixed with VG30 grade bituminous binder and, transporting the hot mix to work site, laying to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH table 500-10 complete in all respects complete as per specifications.. MORTH Specification No. 507 - using 40/60 TPH capacity H.M.P. with Mechanical paver Gr-II (50 mm to 75 mm) with 4.5 % VG-30 Bitumen (P.No.163 of I.No.21.17.6 ) | | | | | | | | |
| | **DODDABOMMAS ANDRA** | | | | | | | | |
| | 1st Cross Road | Cum | 1 | 4.40 | 0.80 | 0.05 | 0.18 | | |
| | **BEL 2ND BLOCK** | | | | | | | | |
| | 4th Main Road 2nd Cross Road | Cum | 1 | 303.50 | 1.00 | 0.05 | 15.18 | | |
| | | Cum | 1 | 303.50 | 6.35 | 0.05 | 96.36 | | |
| | **Sub Total** | | | | | | **111.71** | | |
| | **Consider 5% qty for Profile correction and Dipression filling** | | | | | | **5.59** | | |
| | Basic rate | | | | | | | 6717.00 | |
| | Area weightage 6% | | | | | | | 403.02 | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Total | | | | | | 117.30 | 7120.02 | 835163.13 |
| 12 | KSRRB 500-2.Cleaning the existing black topped surface with brooms,soft brushes and finally dusting with old gunny bags and/or compressed air to receive bituminous treatment including cost of all materials,labhour, HOM of machineries complete as per specifications.(P.No.161,I.No.21.2). | | | | | | | | |
| | **For Road surface** | | | | | | | | |
| | **DODDABOMMAS ANDRA** | | | | | | | | |
| | 7th Cross Road vemanna layout | Sqm | 1 | 205.80 | 4.50 | | 926.10 | | |
| | 1st Cross Road | Sqm | 1 | 185.50 | 5.20 | | 964.60 | | |
| | 2nd'B Cross Road | Sqm | 1 | 64.70 | 5.40 | | 349.38 | | |
| | 2nd'E Cross Road | Sqm | 1 | 32.20 | 5.50 | | 177.10 | | |
| | **BEL 2ND BLOCK** | | | | | | | | |
| | 4th Main Road 2nd Cross Road | Sqm | 1 | 303.50 | 6.35 | | 1927.23 | | |
| | Basic rate | | | | | | | 3.00 | |
| | Area weightage 6% | | | | | | | 0.18 | |
| | Total | | | | | | 4344.41 | 3.18 | 13815.21 |
| 13 | KSRRB M500-7 : Providing and applying tack coat using 80/100 grade bitumen (VG10) on prepared black topped surfaces at 2.5 Kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications.MORTH / Chapter 5 (P.No.161 I.No.21.7) | | | | | | | | |
| | **For Road surface** | | | | | | | | |
| | **DODDABOMMAS ANDRA** | | | | | | | | |
| | 7th Cross Road vemanna layout | Sqm | 1 | 205.80 | 4.50 | | 926.10 | | |
| | 1st Cross Road | Sqm | 1 | 185.50 | 5.20 | | 964.60 | | |
| | 2nd'B Cross Road | Sqm | 1 | 64.70 | 5.40 | | 349.38 | | |
| | 2nd'E Cross Road | Sqm | 1 | 32.20 | 5.50 | | 177.10 | | |
| | **BEL 2ND BLOCK** | | | | | | | | |
| | 4th Main Road 2nd Cross Road | Sqm | 1 | 303.50 | 6.35 | | 1927.23 | | |
| | Basic rate | | | | | | | 12.00 | |
| | Area weightage 6% | | | | | | | 0.72 | |
| | Total | | | | | | 4344.41 | 12.72 | 55260.83 |
| 14 | KSRRB M500-19. Providing and laying bituminous concrete 30-40 mm compacted thickness with VG30 Bitumen grade using 40-60 HMP using crushed aggregates of grading II, premixed with bituminous binder at 5.4% of mix and filler, transporting the hot mix to work site, laying with a mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MoRT&H specification clause No. 500.9 complete in all respects as per specifications. MORTH Specification No. 509 (P.No.165 of I.No.21.22.6) | | | | | | | | |
| | **DODDABOMMAS ANDRA** | | | | | | | | |
| | 7th Cross Road vemanna layout | Cum | 1 | 205.80 | 4.50 | 0.04 | 37.04 | | |
| | 1st Cross Road | Cum | 1 | 185.50 | 5.20 | 0.04 | 38.58 | | |
| | 2nd'B Cross Road | Cum | 1 | 64.70 | 5.40 | 0.04 | 13.98 | | |
| | 2nd'E Cross Road | Cum | 1 | 32.20 | 5.50 | 0.04 | 7.08 | | |
| | **BEL 2ND BLOCK** | | | | | | | | |
| | 4th Main Road 2nd Cross Road | Cum | 1 | 303.50 | 6.35 | 0.04 | 77.09 | | |
| | **Profile correction & Pot Hole Filling** | **No.*(1/2)*Length*(20%*Width)*Depth** | | | | | | | |
| | **DODDABOMMAS ANDRA** | | | | | | | | |
| | 7th Cross Road vemanna layout | Cum | 1 | 205.80 | 4.50 | 0.04 | 3.70 | | |
| | 1st Cross Road | Cum | 1 | 185.50 | 5.20 | 0.04 | 3.86 | | |
| | 2nd'B Cross Road | Cum | 1 | 64.70 | 5.40 | 0.04 | 1.40 | | |
| | 2nd'E Cross Road | Cum | 1 | 32.20 | 5.50 | 0.04 | 0.71 | | |
| | **BEL 2ND BLOCK** | | | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 4th Main Road 2nd Cross Road | Cum | 1 | 303.50 | 6.35 | 0.04 | 7.71 | | |
| | Basic rate | | | | | | | 7659.00 | |
| | Area weightage 6% | | | | | | | 459.54 | |
| | Total | | | | | | 191.15 | 8118.54 | 1551889.93 |
| 15 | Providing Plastic to Bituminous concrete @ 8% | | | | | | | | |
| | 8% OF BC | Kg | | 0.08 | 191.15 | 117.00 | 1789.20 | | |
| | Basic rate | | | | | | | 27.00 | |
| | Area weightage 6% | | | | | | | 1.62 | |
| | Total | | | | | | 1789.20 | 28.62 | 51206.90 |
| 16 | KSRRB M800-13.Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Bituminous Surface:- Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. (P.No.185-I.No.24.15) | | | | | | | | |
| | **DODDABOMMASANDRA** | | | | | | | | |
| | 7th Cross Road vemanna layout | Sqm | 2 | 205.80 | 0.10 | | 41.16 | | |
| | 1st Cross Road | Sqm | 2 | 185.50 | 0.10 | | 37.10 | | |
| | 2nd'B Cross Road | Sqm | 2 | 64.70 | 0.10 | | 12.94 | | |
| | 2nd'E Cross Road | Sqm | 2 | 32.20 | 0.10 | | 6.44 | | |
| | **BEL 2ND BLOCK** | | | | | | | | |
| | 4th Main Road 2nd Cross Road | Sqm | 2 | 303.50 | 0.10 | | 60.70 | | |
| | Basic rate | | | | | | | 512.00 | |
| | Area weightage 6% | | | | | | | 30.72 | |
| | Total | | | | | | 158.34 | 542.72 | 85934.28 |
| | | | | | | | | **Sub Total** | **3916367.79** |
| | Preperation of DPR And Project management Consultancy Charges(2% of estimated cost) | | | | | | | | 80000 |
| | | | | | | | | Miscellenious and rounding | 3632 |
| | | | | | | | | **TOTAL AMOUNT** | **4000000** |
| | | | | | | | | | **RUPEES FORTY LAKHS ONLY** |

CERTIFICATE:

1) The work spot has been inspected and found to be necessary
2) The work spot comes under B.B.M.P
3) The provisions made in the estimate are necessary and minimum
4) The estimate is based on C.S.R of 2016-2017

Assistant Executive Engineer
Vidyaranyapura Sub Division
BBMP, Bangalore - 97

# 7) IMPROVEMENTS AND ASPHALTING FROM PETA SIDDAPPA CIRCLE TO APROOVA APARTMENT ROAD IN WARD NO. 10 VIDYARANYAPURA SUB DIVISION

**BRUHAT BANGALORE MAHANAGARA PALIKE**

**PREPARATION OF DPR FOR PACKAGE NO. 04**

**(PACKAGE CONSISTS OF 28 WORKS IN WARD NO 10 AND WARD NO 11)**

**NAME OF WORK : IMPROVEMENTS AND ASPHALTING FROM PETA SIDDAPPA CIRCLE TO APROOVA APARTMENT ROAD IN WARD NO. 10 VIDYARANYAPURA SUB DIVISION.**

| Sl.No. | Description of work | Mesurement | | | | | Qty | Rate | Amount |
|---|---|---|---|---|---|---|---|---|---|
| | | Unit | No | L | B | D | | | |
| 1 | KSRB 2-1.1: Earthwork in surface excavation in ordinary soil for leveling and lowering the ground manually (other than foundation of buildings, culverts, roads drains and trenches of pipe line and cables) and removing the excavated stuff to a distance not exceeding 50m and lift up lift 1.5, excavated surface leveled and neatly dressed disposed earth to be leveled after breaking of clods and neatly dressed as per specifications.Specification. No. KBS 2.1(a)/2.3.1(P.No.5-I.No.2.1) | | | | | | | | |
| | **Desilting drain** | | | | | | | | |
| | **DODDABOMMAS ANDRA** | | | | | | | | |
| | 2nd Cross Road | Cum | 2 | 190.80 | 0.70 | 0.40 | 106.85 | | |
| | **BEL 2ND BLOCK** | | | | | | | | |
| | 4th Main Road 4th Cross Road | Cum | 2 | 123.50 | 0.60 | 0.40 | 59.28 | | |
| | Basic rate | | | | | | | 157.00 | |
| | Area weightage 6% | | | | | | | 9.42 | |
| | Total | | | | | | **166.13** | **166.42** | **27647.02** |
| 2 | Removing B.S.slab of Drain and stacking.(P.No.25-I.No.5.32) | | | | | | | | |
| | **Closed Drain** | | | | | | | | |
| | **Cover Slab** | | | | | | | | |
| | **DODDABOMMAS ANDRA** | | | | | | | | |
| | 2nd Cross Road | Sqm | 2 | 190.80 | 0.70 | | 267.12 | | |
| | **BEL 2ND BLOCK** | | | | | | | | |
| | 4th Main Road 4th Cross Road | Sqm | 2 | 123.50 | 0.60 | | 148.20 | | |
| | **Sub Total** | | | | | | **415.32** | | |
| | **Consider 5% Qnty for Removing** | | | | | | **20.77** | | |
| | Basic rate | | | | | | | 62.00 | |
| | Area weightage 6% | | | | | | | 3.72 | |
| | Total | | | | | | **20.77** | **65.72** | **1364.74** |
| 3 | Removing and refixing stone slabs of drains and pointing in CM (1:3) (P.No.25-I.No.5.33) | | | | | | | | |
| | **Closed Drain** | | | | | | | | |
| | **Cover Slab** | | | | | | | | |
| | **DODDABOMMAS ANDRA** | | | | | | | | |
| | 2nd Cross Road | Sqm | 2 | 190.80 | 0.70 | | 267.12 | | |
| | **BEL 2ND BLOCK** | | | | | | | | |
| | 4th Main Road 4th Cross Road | Sqm | 2 | 123.50 | 0.60 | | 148.20 | | |
| | **Sub Total** | | | | | | **415.32** | | |
| | **Consider 30% Qnty for Removing & Refixing** | | | | | | **124.60** | | |
| | Basic rate | | | | | | | 76.00 | |
| | Area weightage 6% | | | | | | | 4.56 | |
| | Total | | | | | | **124.60** | **80.56** | **10037.45** |
| 4 | Providing granite slabs of selected quality roughly dressed havinf a size of 7.5 cms thick and fixed in cement mortar (1:6) including fixing curing ete., complete.(P.No.25,I.No.5.31.1) | | | | | | | | |
| | **Closed Drain** | | | | | | | | |
| | **Cover Slab** | | | | | | | | |
| | **DODDABOMMAS ANDRA** | | | | | | | | |
| | 2nd Cross Road | Sqm | 2 | 190.80 | 0.70 | | 267.12 | | |
| | **BEL 2ND BLOCK** | | | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 4th Main Road 4th Cross Road | Sqm | 2 | 123.50 | 0.60 | | 148.20 | | |
| | **Sub Total** | | | | | | **415.32** | | |
| | **Consider 5% Qnty for Refixing** | | | | | | **20.77** | | |
| | Basic rate | | | | | | | 628.00 | |
| | Area weightage 6% | | | | | | | 37.68 | |
| | Total | | | | | | **20.77** | **665.68** | **13823.51** |
| 5 | KSRB 300-1 : Earthwork excavation by manual means in ordinary soil involving an average horizontal throw upto | | | | | | | | |
| | **Road cutting portions** | | | | | | | | |
| | **BEL 2ND BLOCK** | | | | | | | | |
| | 4th Main Road 4th Cross Road | Cum | 1 | 123.50 | 6.60 | 0.23 | 187.47 | | |
| | Basic rate | | | | | | | 82.00 | |
| | Area weightage 6% | | | | | | | 4.92 | |
| | Total | | | | | | **187.47** | **86.92** | **16295.15** |
| 6 | Lead for disposal of earth shall be payable at Carriage rates (Lead & Lift) by mechanical means including loading and unloading up to 15kms.(Refer Table. Page No.139) | | | | | | | | |
| | Considered same Qty vide I.No.1+I.No.5 | Cum | | | | | 353.60 | | |
| | Average Weight of Earth (1.28 Ton/cum, Basic rate Rs.2.5 Tonne/Km.) For 15 Kms = (2.5 x 1.28 x 15)/- | | 48.00 | | | | | | |
| | KSRRB M100-1 Add loading & unloading (P.No.130,I.No.17.1) | | 68.00 | | | | | | |
| | Total rate per Cum | | 116.00 | | | | | | |
| | Basic rate | | | | | | | 116.00 | |
| | Area weightage 6% | | | | | | | 6.96 | |
| | Total | | | | | | **353.60** | **122.96** | **43478.78** |
| 7 | KSRRB M400-17.Providing,laying, spreading and compacting crushed stone aggregates of granite/trap/ basalt to wet mix macadam specification including pre mixing the Material with water at OMC in mechanical mix plant carriage of mixed material by tipper to site, laying in uniform layers with paver in sub-base/ base course on well prepared surface and compacting with vibratory roller to achieve the desired density. complete as per specifications.MORTH specification No.406(Page No.158,I.No.20.18) | | | | | | | | |
| | **Road cutting portions** | | | | | | | | |
| | **BEL 2ND BLOCK** | | | | | | | | |
| | 4th Main Road 4th Cross Road | Cum | 1 | 123.50 | 6.60 | 0.23 | 187.47 | | |
| | Basic rate | | | | | | | 1668.00 | |
| | Area weightage 6% | | | | | | | 100.08 | |
| | Total | | | | | | **187.47** | **1768.08** | **331467.26** |
| 8 | KSRRB 500-1.Cleaning the existing WBM Road surface including removing of binding materials and other foreign matter with wire brushes and small picks sweeping with brooms or soft brushes and finally dusting with old gunny bags and bar or compressed air to receive bituminous treatment including cost of all materials, labhour, HOM of machineries complet as per specifications.(P.No.161,I.No.21.1) | | | | | | | | |
| | **Road cutting portions** | | | | | | | | |
| | **BEL 2ND BLOCK** | | | | | | | | |
| | 4th Main Road 4th Cross Road | Sqm | 1 | 123.50 | 6.60 | | 815.10 | | |
| | Basic rate | | | | | | | 13.00 | |
| | Area weightage 6% | | | | | | | 0.78 | |
| | Total | | | | | | **815.10** | **13.78** | **11232.08** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 9 | KSRRB M 500-6, Providing and applying primer coat with SS bitumen emulsion on prepared surface of granular Base such as WBM WMM including clearing of road surface and spraying primer at the rate of 0.60 kglsqm using mechanical means complete as per specifications. As per MORTH specification clause No. 502 (P.No.161, I.No.21.6 ) | | | | | | | | |
| | Considered same Above Qty | Sqm | | | | | 815.10 | | |
| | Basic rate | | | | | | | 26.00 | |
| | Area weightage 6% | | | | | | | 1.56 | |
| | Total | | | | | | **815.10** | **27.56** | **22464.16** |
| 10 | KSRRB M500-17. Providing and laying dense graded bituminous macadam using crushed aggregates of specified grading, premixed with VG30 grade bituminous binder and, transporting the hot mix to work site, laying to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH table 500-10 complete in all respects complete as per specifications.. MORTH Specification No. 507 - using 40/60 TPH capacity H.M.P. with Mechanical paver Gr-II (50 mm to 75 mm) with 4.5 % VG-30 Bitumen (P.No.163 of I.No.21.17.6 ) | | | | | | | | |
| | **BEL 2ND BLOCK** | | | | | | | | |
| | 4th Main Road 4th Cross Road | Cum | 1 | 123.50 | 6.60 | 0.05 | 40.76 | | |
| | **Sub Total** | | | | | | **40.76** | | |
| | **Consider 5% qty for Profile correction and Dipression filling** | | | | | | **2.04** | | |
| | Basic rate | | | | | | | 6717.00 | |
| | Area weightage 6% | | | | | | | 403.02 | |
| | Total | | | | | | **42.79** | **7120.02** | **304685.24** |
| 11 | KSRRB 500-2.Cleaning the existing black topped surface with brooms,soft brushes and finally dusting with old gunny bags and/or compressed air to receive bituminous treatment including cost of all materials,labhour, HOM of machineries complete as per specifications.(P.No.161,I.No.21.2). | | | | | | | | |
| | **For Road surface** | | | | | | | | |
| | **DODDABOMMAS ANDRA** | | | | | | | | |
| | 2nd Cross Road | Sqm | 1 | 190.80 | 4.60 | | 877.68 | | |
| | **BEL 2ND BLOCK** | | | | | | | | |
| | 4th Main Road 4th Cross Road | Sqm | 1 | 123.50 | 6.60 | | 815.10 | | |
| | Basic rate | | | | | | | 3.00 | |
| | Area weightage 6% | | | | | | | 0.18 | |
| | Total | | | | | | **1692.78** | **3.18** | **5383.04** |
| 12 | KSRRB M500-7 : Providing and applying tack coat using 80/100 grade bitumen (VG10) on prepared black topped surfaces at 2.5 Kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications.MORTH / Chapter 5 (P.No.161 I.No.21.7) | | | | | | | | |
| | **For Road surface** | | | | | | | | |
| | **DODDABOMMAS ANDRA** | | | | | | | | |
| | 2nd Cross Road | Sqm | 1 | 190.80 | 4.60 | | 877.68 | | |
| | **BEL 2ND BLOCK** | | | | | | | | |
| | 4th Main Road 4th Cross Road | Sqm | 1 | 123.50 | 6.60 | | 815.10 | | |
| | Basic rate | | | | | | | 12.00 | |
| | Area weightage 6% | | | | | | | 0.72 | |
| | Total | | | | | | **1692.78** | **12.72** | **21532.16** |
| 13 | KSRRB M500-19. Providing and laying bituminous concrete 30-40 mm compacted thickness with VG30 Bitumen grade using 40-60 HMP using crushed aggregates of grading II, premixed with bituminous binder at 5.4% of mix and filler, transporting the hot mix to work site, laying with a mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MoRT&H specification clause No. 500.9 complete in all respects as per specifications. MORTH Specification No. 509 (P.No.165 | | | | | | | | |
| | **DODDABOMMAS ANDRA** | | | | | | | | |
| | 2nd Cross Road | Cum | 1 | 190.80 | 4.60 | 0.04 | 35.11 | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | **BEL 2ND BLOCK** | | | | | | | | |
| | 4th Main Road 4th Cross Road | Cum | 1 | 123.50 | 6.60 | 0.04 | 32.60 | | |
| | **Profile correction & Pot Hole Filling** | **No.*(1/2)*Length*(20%*Width)*Depth** | | | | | | | |
| | **DODDABOMMAS ANDRA** | | | | | | | | |
| | 2nd Cross Road | Cum | 1 | 190.80 | 4.60 | 0.04 | 3.51 | | |
| | **BEL 2ND BLOCK** | | | | | | | | |
| | 4th Main Road 4th Cross Road | Cum | 1 | 123.50 | 6.60 | 0.04 | 3.26 | | |
| | Basic rate | | | | | | | 7659.00 | |
| | Area weightage 6% | | | | | | | 459.54 | |
| | Total | | | | | | 74.48 | 8118.54 | 604687.69 |
| 14 | Providing Plastic to Bituminous concrete @ 8% | | | | | | | | |
| | 8% OF BC | Kg | | 0.08 | 74.48 | 117.00 | 697.15 | | |
| | Basic rate | | | | | | | 27.00 | |
| | Area weightage 6% | | | | | | | 1.62 | |
| | Total | | | | | | 697.15 | 28.62 | 19952.56 |
| 15 | KSRRB M800-13.Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Bituminous Surface:- Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. (P.No.185-I.No.24.15) | | | | | | | | |
| | **DODDABOMMAS ANDRA** | | | | | | | | |
| | 2nd Cross Road | Sqm | 2 | 190.80 | 0.10 | | 38.16 | | |
| | **BEL 2ND BLOCK** | | | | | | | | |
| | 4th Main Road 4th Cross Road | Sqm | 2 | 123.50 | 0.10 | | 24.70 | | |
| | Basic rate | | | | | | | 512.00 | |
| | Area weightage 6% | | | | | | | 30.72 | |
| | Total | | | | | | 62.86 | 542.72 | 34115.38 |
| | | | | | | | | **Sub Total** | **1468166.23** |
| | Preperation of DPR And Project management Consultancy Charges(2% of estimated cost) | | | | | | | | 30000 |
| | | | | | | | | Miscellenious and rounding | 1834 |
| | | | | | | | | **TOTAL AMOUNT** | **1500000** |
| | | | | | | | | **RUPEES FIFTEEN LAKHS ONLY** | |

CERTIFICATE:

1) The work spot has been inspected and found to be necessary
2) The work spot comes under B.B.M.P
3) The provisions made in the estimate are necessary and minimum
4) The estimate is based on C.S.R of 2016-2017

Assistant Executive Engineer
Vidyaranyapura Sub Division
BBMP, Bangalore - 97

# 8) IMPROVEMENTS AND ASPHALTING TO ROADS AND DRAINS AT CHAMUNDESHWARI LAYOUT AND SURROUNDING AREAS IN WARD NO. 10 VIDYARANYAPURA SUB DIVISION

**BRUHAT BANGALORE MAHANAGARA PALIKE**

**PREPARATION OF DPR FOR PACKAGE NO. 04**

**(PACKAGE CONSISTS OF 28 WORKS IN WARD NO 10 AND WARD NO 11)**

**NAME OF WORK : IMPROVEMENTS AND ASPHALTING TO ROADS AND DRAINS AT CHAMUNDESHWARI LAYOUT AND SURROUNDING AREAS IN WARD NO. 10 VIDYARANYAPURA SUB DIVISION.**

| Sl.No. | Description of work | Mesurement | | | | | Qty | Rate | Amount |
|---|---|---|---|---|---|---|---|---|---|
| | | Unit | No | L | B | D | | | |
| 1 | KSRB 2-1.1: Earthwork in surface excavation in ordinary soil for leveling and lowering the ground manually (other than foundation of buildings, culverts, roads drains and trenches of pipe line and cables) and removing the excavated stuff to a distance not exceeding 50m and lift up lift 1.5, excavated surface leveled and neatly dressed disposed earth to be leveled after breaking of clods and neatly dressed as per specifications.Specification. No. KBS 2.1(a)/2.3.1(P.No.5-I.No.2.1) | | | | | | | | |
| | **Desilting drain** | | | | | | | | |
| | **CHAMUNDESHWARI LAYOUT** | | | | | | | | |
| | 2nd Cross Road | Cum | 2 | 83.10 | 0.70 | 0.40 | 46.54 | | |
| | Basic rate | | | | | | | 157.00 | |
| | Area weightage 6% | | | | | | | 9.42 | |
| | Total | | | | | | **46.54** | **166.42** | **7744.52** |
| 2 | Removing B.S.slab of Drain and stacking.(P.No.25-I.No.5.32) | | | | | | | | |
| | **Closed Drain** | | | | | | | | |
| | **Cover Slab** | | | | | | | | |
| | **CHAMUNDESHWARI LAYOUT** | | | | | | | | |
| | 2nd Cross Road | Sqm | 2 | 83.10 | 0.70 | | 116.34 | | |
| | **Sub Total** | | | | | | **116.34** | | |
| | **Consider 5% Qnty for Removing** | | | | | | **5.82** | | |
| | Basic rate | | | | | | | 62.00 | |
| | Area weightage 6% | | | | | | | 3.72 | |
| | Total | | | | | | **5.82** | **65.72** | **382.29** |
| 3 | Removing and refixing stone slabs of drains and pointing in CM (1:3) (P.No.25-I.No.5.33) | | | | | | | | |
| | **Closed Drain** | | | | | | | | |
| | **Cover Slab** | | | | | | | | |
| | **CHAMUNDESHWARI LAYOUT** | | | | | | | | |
| | 2nd Cross Road | Sqm | 2 | 83.10 | 0.70 | | 116.34 | | |
| | **Sub Total** | | | | | | **116.34** | | |
| | **Consider 30% Qnty for Removing & Refixing** | | | | | | **34.90** | | |
| | Basic rate | | | | | | | 76.00 | |
| | Area weightage 6% | | | | | | | 4.56 | |
| | Total | | | | | | **34.90** | **80.56** | **2811.71** |
| 4 | Providing granite slabs of selected quality roughly dressed havinf a size of 7.5 cms thick and fixed in cement mortar (1:6) including fixing curing etc., complete.(P.No.25,I.No.5.31.1) | | | | | | | | |
| | **Closed Drain** | | | | | | | | |
| | **Cover Slab** | | | | | | | | |
| | **CHAMUNDESHWARI LAYOUT** | | | | | | | | |
| | 2nd Cross Road | Sqm | 2 | 83.10 | 0.70 | | 116.34 | | |
| | **Sub Total** | | | | | | **116.34** | | |
| | **Consider 5% Qnty for Refixing** | | | | | | **5.82** | | |
| | Basic rate | | | | | | | 628.00 | |
| | Area weightage 6% | | | | | | | 37.68 | |
| | Total | | | | | | **5.82** | **665.68** | **3872.26** |
| 5 | Lead for disposal of earth shall be payable at Carriage rates (Lead & Lift) by mechanical means including loading and unloading up to 15kms.(Refer Table. Page No.139) | | | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Considered same Qty vide I.No.1+I.No.6 | Cum | | | | | 212.49 | | |
| | Average Weight of Earth (1.28 Ton/cum, Basic rate Rs.2.5Tonne/Km.) For 15 Kms = (2.5 x 1.28 x 15)/- | | 48.00 | | | | | | |
| | KSRRB M100-1 Add loading & unloading (P.No.130,I.No.17.1) | | 68.00 | | | | | | |
| | Total rate per Cum | | 116.00 | | | | | | |
| | Basic rate | | | | | | | 116.00 | |
| | Area weightage 6% | | | | | | | 6.96 | |
| | Total | | | | | | **212.49** | **122.96** | **26127.22** |
| 6 | KSRRB M200-24. Dismantling of cement concrete pavement by mechanical means using pneumatic tools, breaking to pieces not exceeding 0.02 cum in volume and stock piling at designated locations and disposal of dismantled materials stacking serviceable and unserviceable materials seperately complete as per specifications. MORTH Specification No. 202(P.No.138- I.No.18.47) | | | | | | | | |
| | **CHAMUNDESHWARI LAYOUT** | | | | | | | | |
| | 2nd cross 4th phase | Cum | 1 | 46.70 | 5.00 | 0.15 | 35.03 | | |
| | unnamed Road (next to 1ST Cross 2nd Phase ) | Cum | 1 | 24.00 | 5.00 | 0.15 | 18.00 | | |
| | unnamed Road (next to 2nd Cross 4th Phase ) | Cum | 1 | 44.00 | 5.20 | 0.15 | 34.32 | | |
| | unnamed Road (dead end curve Road) | Cum | 1 | 59.50 | 3.50 | 0.15 | 31.24 | | |
| | 2nd Cross Road | Cum | 1 | 83.10 | 3.80 | 0.15 | 47.37 | | |
| | Basic rate | | | | | | | 781.00 | |
| | Area weightage 6% | | | | | | | 46.86 | |
| | Total | | | | | | **165.95** | **827.86** | **137382.95** |
| 7 | KSRRB M600-1. Construction of dry lean cement concrete mix CC1:5:10 with OPC cement @160Kgs, with 25mm and down size graded granite metal coarse aggregate at 0.86cum and fine aggregates @ 0.58cum Sub- base over a prepared sub-grade with (coarse and fine aggregate conforming to IS: 383) aggregate cement ratio not to exceed 15:1. Aggregate gradation after blending to be as per Table 600-1, cement content not to be less than 160 kg/ cum, optimum moisture content to be determined during trial length construction, concrete strength not to be less than 10 Mpa at 7 days, mixed in a batching plant, transported to site, laid with a paver with electronic sensor, compacting with 8-10 tonnes vibratory roller, finishing and curing complete as per specifications.MORTH Specification No. 601, Item No. 22.1, Pg No. 176 | | | | | | | | |
| | **CHAMUNDESHWARI LAYOUT** | | | | | | | | |
| | 2nd cross 4th phase | Cum | 1 | 46.70 | 5.00 | 0.15 | 35.03 | | |
| | unnamed Road (next to 1ST Cross 2nd Phase ) | Cum | 1 | 24.00 | 5.00 | 0.15 | 18.00 | | |
| | unnamed Road (next to 2nd Cross 4th Phase ) | Cum | 1 | 44.00 | 5.20 | 0.15 | 34.32 | | |
| | unnamed Road (dead | Cum | 1 | 59.50 | 3.50 | 0.15 | 31.24 | | |
| | 2nd Cross Road | Cum | 1 | 83.10 | 3.80 | 0.15 | 47.37 | | |
| | Basic rate | | | | | | | 3761.00 | |
| | Area weightage 6% | | | | | | | 225.66 | |
| | Total | | | | | | **165.95** | **3986.66** | **661584.23** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 8 | Cement concrete pavement.Construction of un-reinforced plain cement concrete pavement, thickness as per design, over a prepared sub base with OPC cement or any other type as per clause 1051.2.2 design mix M20/M30 , with 25mm and down size graded granite metal coarse aggregates and fine aggregtes , with superplastisiser @3lts confirming to IS9103-1999 Reaffirmed-2008 , mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). Spreading the concrete with shovels, rackers compacted using needle, screed and plate vibrator and finished in a continuous operation including provision of contraction, expansion, construction and longitudinal joints including groove cutting charges, joint filler, separation membrane, selant primer, joint sealant, admixtures as approved, curing compound, finishing to lines and grades as per drawing complete as per specifications. - M30 (at 360Kg per cum coarse aggregate @ 0.69cum and fine aggregate @ 0.46cum) Pg No.177 Item No.22.6.1 | | | | | | | | |
| | **CHAMUNDESHWARI LAYOUT** | | | | | | | | |
| | 2nd cross 4th phase | Cum | 1 | 46.70 | 5.00 | 0.15 | 35.03 | | |
| | unnamed Road (next to 1ST Cross 2nd Phase ) | Cum | 1 | 24.00 | 5.00 | 0.15 | 18.00 | | |
| | unnamed Road (next to 2nd Cross 4th Phase ) | Cum | 1 | 44.00 | 5.20 | 0.15 | 34.32 | | |
| | unnamed Road (dead end curve Road) | Cum | 1 | 59.50 | 3.50 | 0.15 | 31.24 | | |
| | 2nd Cross Road | Cum | 1 | 83.10 | 3.80 | 0.15 | 47.37 | | |
| | **Sub Total** | | | | | | **165.95** | | |
| | **Consider 5% qty for camber correction** | | | | | | **8.30** | | |
| | Basic rate | | | | | | | 5866.00 | |
| | Area weightage 6% | | | | | | | 351.96 | |
| | Total | | | | | | **174.25** | **6217.96** | **1083460.72** |
| 9 | KSRRB M800-13.Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Conrete Surface:- Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms and 2Ltr of Primer per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. (P.No.192- I.No.24.57) | | | | | | | | |
| | **CHAMUNDESHWARI LAYOUT** | | | | | | | | |
| | 2nd cross 4th phase | Sqm | 2 | 46.70 | 0.10 | | 9.34 | | |
| | unnamed Road (next to 1ST Cross 2nd Phase ) | Sqm | 2 | 24.00 | 0.10 | | 4.80 | | |
| | unnamed Road (next to 2nd Cross 4th Phase ) | Sqm | 2 | 44.00 | 0.10 | | 8.80 | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | unnamed Road (dead end curve Road) | Sqm | 2 | 59.50 | 0.10 | | 11.90 | | |
| | 2nd Cross Road | Sqm | 2 | 83.10 | 0.10 | | 16.62 | | |
| | Basic rate | | | | | | | 647.00 | |
| | Area weightage 6% | | | | | | | 38.82 | |
| | Total | | | | | | 51.46 | 685.82 | 35292.30 |
| | | | | | | | | **Sub Total** | **1958658.20** |
| | Preperation of DPR And Project management Consultancy Charges(2% of estimated cost) | | | | | | | | 40000 |
| | Miscellenious and rounding | | | | | | | | 1342 |
| | | | | | | | | **TOTAL AMOUNT** | **2000000** |
| **RUPEES TWENTY LAKHS ONLY** | | | | | | | | | |

CERTIFICATE:

1) The work spot has been inspected and found to be necessary
2) The work spot comes under B.B.M.P
3) The provisions made in the estimate are necessary and minimum
4) The estimate is based on C.S.R of 2016-2017

Assistant Executive Engineer
Vidyaranyapura Sub Division
BBMP, Bangalore - 97

# WARD NO.11

# 9) IMPROVEMENTS AND ASPHALTING TO ROADS AND DRAINS AT KUVEMPUNAGARA 1ST STAGE IN WARD NO. 11 KUVEMPUNAGARA, VIDYARANYAPURA SUB DIVISION.VIDYARANYAPURA SUB DIVISION

**BRUHAT BANGALORE MAHANAGARA PALIKE**

**PREPARATION OF DPR FOR PACKAGE NO. 04**

**(PACKAGE CONSISTS OF 28 WORKS IN WARD NO 10 AND WARD NO 11)**

**NAME OF WORK:-IMPROVEMENTS AND ASPHALTING TO ROADS AND DRAINS AT KUVEMPUNAGARA 1ST STAGE IN WARD NO. 11 KUVEMPUNAGARA, VIDYARANYAPURA SUB DIVISION.VIDYARANYAPURA SUB**

| Sl.No. | Description of work | Measurement | | | | | Qty | Rate | Amount |
|---|---|---|---|---|---|---|---|---|---|
| | | Unit | No | L | B | D | | | |
| 1 | KSRB 2-1.1: Earthwork in surface excavation in ordinary soil for leveling and lowering the ground manually (other than foundation of buildings, culverts, roads drains and trenches of pipe line and cables) and removing the excavated stuff to a distance not exceeding 50m and lift up lift 1.5, excavated surface leveled and neatly dressed disposed earth to be leveled after breaking of clods and neatly dressed as per specifications.Specification. No. KBS 2.1(a)/2.3.1(P.No.5-I.No.2.1) | | | | | | | | |
| | **Desilting drain** | | | | | | | | |
| | **KUVEMPUNAGARA 1st STAGE** | | | | | | | | |
| | kamaraja road 8th cross upto dead end | Cum | 2 | 301.50 | 0.45 | 0.40 | 108.54 | | |
| | opposite to 9th cross | Cum | 2 | 49.00 | 0.60 | 0.40 | 23.52 | | |
| | 12th cross upto the coconut tree (next to the 11th cross) | Cum | 2 | 70.00 | 0.50 | 0.40 | 28.00 | | |
| | 11th cross (down next to CC road) (continution of khaliamma temple) | Cum | 2 | 73.00 | 0.65 | 0.40 | 37.96 | | |
| | **BALAJI LAYOUT** | | | | | | | | |
| | 3rd main road | Cum | 2 | 31.90 | 0.60 | 0.40 | 15.31 | | |
| | Basic rate | | | | | | | 157.00 | |
| | Area weightage 6% | | | | | | | 9.42 | |
| | Total | | | | | | 213.33 | 166.42 | 35502.71 |
| 2 | Removing B.S.slab of Drain and stacking.(P.No.25-I.No.5.32) | | | | | | | | |
| | **Open Drain (Sides & Bottom)** | | | | | | | | |
| | **KUVEMPUNAGARA 1st STAGE** | | | | | | | | |
| | kamaraja road 8th cross upto dead end | Sqm | 2 | 301.50 | 1.65 | | 994.95 | | |
| | opposite to 9th cross | Sqm | 2 | 49.00 | 1.80 | | 176.40 | | |
| | 12th cross upto the coconut tree (next to the 11th cross) | Sqm | 2 | 70.00 | 1.70 | | 238.00 | | |
| | 11th cross (down next to CC road) (continution of khaliamma temple) | Sqm | 2 | 73.00 | 1.85 | | 270.10 | | |
| | **BALAJI LAYOUT** | | | | | | | | |
| | 3rd main road | Sqm | 2 | 31.90 | 1.80 | | 114.84 | | |
| | **Sub Total** | | | | | | 1794.29 | | |
| | **Consider 5% Qnty for Removing** | Sqm | | | | | 89.71 | | |
| | Basic rate | | | | | | | 62.00 | |
| | Area weightage 6% | | | | | | | 3.72 | |
| | Total | | | | | | 89.71 | 65.72 | 5896.04 |
| 3 | Providing granite slabs of selected quality roughly dressed havinf a size of 10 cms thick and fixed in cement mortar (1:6) including fixing curing ete., complete.(P.No.25,I.No.5.312) | | | | | | | | |
| | **Open Drain (Sides & Bottom)** | | | | | | | | |
| | **KUVEMPUNAGARA 1st STAGE** | | | | | | | | |
| | kamaraja road 8th cross upto dead end | Sqm | 2 | 301.50 | 1.65 | | 994.95 | | |
| | opposite to 9th cross | Sqm | 2 | 49.00 | 1.80 | | 176.40 | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 12th cross upto the coconut tree (next to the 11th cross) | Sqm | 2 | 70.00 | 1.70 | | 238.00 | | |
| | 11th cross (down next to CC road) (continution of khaliamma temple) | Sqm | 2 | 73.00 | 1.85 | | 270.10 | | |
| | **BALAJI LAYOUT** | | | | | | | | |
| | 3rd main road | Sqm | 2 | 31.90 | 1.80 | | 114.84 | | |
| | **Sub Total** | | | | | | **1794.29** | | |
| | **Consider 5% Qnty for Refixing** | Sqm | | | | | **89.71** | | |
| | Basic rate | | | | | | | 779.00 | |
| | Area weightage 6% | | | | | | | 46.74 | |
| | Total | | | | | | **89.71** | **825.74** | **74080.85** |
| 4 | KSRB 300-1 : Earthwork excavation by manual means in ordinary soil involving an average horizontal throw upto 2meters and an average lift upto 1.5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specifications.(P.No.142,I.No.19.1) | | | | | | | | |
| | **Road Cutting Portions** | | | | | | | | |
| | **KUVEMPUNAGARA 1st STAGE** | | | | | | | | |
| | 11th cross (down next to CC road) (continution of khaliamma temple) | Cum | 1 | 4.10 | 0.30 | 0.23 | 0.28 | | |
| | Basic rate | | | | | | | 82.00 | |
| | Area weightage 6% | | | | | | | 4.92 | |
| | Total | | | | | | **0.28** | **86.92** | **24.59** |
| 5 | Lead for disposal of earth shall be payable at Carriage rates (Lead & Lift) by mechanical means including loading and unloading up to 15kms.(Refer Table. Page No.139) | | | | | | | | |
| | Considered same Qty vide I.No.1 +I.No.4 + I.No.16 | Cum | | | | | 255.51 | | |
| | Average Weight of Earth (1.28 Ton/cum, Basic rate Rs.2.50 Tonne/Km.) For 15 Kms = (2.50x 1.28 x 15)/- | | 48.00 | | | | | | |
| | KSRRB M100-1 Add loading & unloading (P.No.130,I.No.17.1) | | 68.00 | | | | | | |
| | Total rate per Cum | | 116.00 | | | | | | |
| | Basic rate | | | | | | | 116.00 | |
| | Area weightage 6% | | | | | | | 6.96 | |
| | Total | | | | | | **255.51** | **122.96** | **31417.50** |
| 6 | KSRRB M400-17.Providing,laying, spreading and compacting crushed stone aggregates of granite/trap/ basalt to wet mix macadam specification including pre mixing the Material with water at OMC in mechanical mix plant carriage of mixed material by tipper to site, laying in uniform layers with paver in sub-base/ base course on well prepared surface and compacting with vibratory roller to achieve the desired density. complete as per specifications.MORTH specification No.406(Page No.158,I.No.20.18) | | | | | | | | |
| | **KUVEMPUNAGARA 1st STAGE** | | | | | | | | |
| | 11th cross (down next to CC road) (continution of khaliamma temple) | Cum | 1 | 4.10 | 0.30 | 0.23 | 0.28 | | |
| | Basic rate | | | | | | | 1668.00 | |
| | Area weightage 6% | | | | | | | 100.08 | |
| | Total | | | | | | **0.28** | **1768.08** | **500.19** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 7 | KSRRB 300-50. Scarifying bituminous course 50mm to 75mm thick along with premix carpet / surface dressing by road roller attached with scarifier without disturbing the base and stacking the debris including cost of all labour charges, HOM of machineries complete as per specifications. MORTH / Chapter 3(P.No.147, I.No.19.56 ) | | | | | | | | |
| | **KUVEMPUNAGARA 1st STAGE** | | | | | | | | |
| | kamaraja road 8th cross upto dead end | Sqm | 1 | 301.50 | 5.70 | | 1718.55 | | |
| | Basic rate | | | | | | | 29.00 | |
| | Area weightage 6% | | | | | | | 1.74 | |
| | Total | | | | | | **1718.55** | **30.74** | **52828.23** |
| 8 | KSRRB 500-1.Cleaning the existing WBM Road surface including removing of binding materials and other foreign matter with wire brushes and small picks sweeping with brooms or soft brushes and finally dusting with old gunny bags and bar or compressed air to receive bituminous treatment including cost of all materials, labhour, HOM of machineries complet as per specifications.(P.No.161,I.No.21.1) | | | | | | | | |
| | **KUVEMPUNAGARA 1st STAGE** | | | | | | | | |
| | 11th cross (down next to CC road) (continution of khaliamma temple) | Sqm | 1 | 4.10 | 0.30 | | 1.23 | | |
| | kamaraja road 8th cross upto dead end | Sqm | 1 | 301.50 | 5.70 | | 1718.55 | | |
| | Basic rate | | | | | | | 13.00 | |
| | Area weightage 6% | | | | | | | 0.78 | |
| | Total | | | | | | **1719.78** | **13.78** | **23698.57** |
| 9 | KSRRB M 500-6, Providing and applying primer coat with SS bitumen emulsion on prepared surface of granular Base such as WBM WMM including clearing of road surface and spraying primer at the rate of 0.60 kglsqm using mechanical means complete as per specifications. As per MORTH specification clause No. 502 (P.No.161, I.No.21.6 ) | | | | | | | | |
| | Considered same Above Qty | Sqm | | | | | 1719.78 | | |
| | Basic rate | | | | | | | 26.00 | |
| | Area weightage 6% | | | | | | | 1.56 | |
| | Total | | | | | | **1719.78** | **27.56** | **47397.14** |
| 10 | KSRRB M500-17. Providing and laying dense graded bituminous macadam using crushed aggregates of specified grading, premixed with VG30 grade bituminous binder and, transporting the hot mix to work site, laying to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH table 500-10 complete in all respects complete as per specifications.. MORTH Specification No. 507 - using 40/60 TPH capacity H.M.P. with Mechanical paver Gr-II (50 mm to 75 mm) with 4.5 % VG-30 Bitumen (P.No.163 of I.No.21.17.6 ) | | | | | | | | |
| | **KUVEMPUNAGARA 1st STAGE** | | | | | | | | |
| | 11th cross (down next to CC road) (continution of khaliamma temple) | Cum | 1 | 4.10 | 0.30 | 0.05 | 0.06 | | |
| | kamaraja road 8th cross upto dead end | Sqm | 1 | 301.50 | 5.70 | 0.05 | 85.93 | | |
| | **Sub Total** | | | | | | **85.99** | | |
| | **Consider 5% qty for Profile correction and Dipression filling** | | | | | | **4.2995** | | |
| | Basic rate | | | | | | | 6717.00 | |
| | Area weightage 6% | | | | | | | 403.02 | |
| | Total | | | | | | **90.29** | **7120.02** | **642855.57** |
| 11 | KSRRB 500-2.Cleaning the existing black topped surface with brooms,soft brushes and finally dusting with old gunny bags and/or compressed air to receive bituminous treatment including cost of all materials,labhour, HOM of machineries complete as per specifications.(P.No.161,I.No.21.2). | | | | | | | | |
| | **KUVEMPUNAGARA 1st STAGE** | | | | | | | | |
| | **For Road surface** | | | | | | | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | kamaraja road 8th cross upto dead end | Sqm | 1 | 301.50 | 5.70 | | 1718.55 | | |
| | 12th cross upto the coconut tree (next to the 11th cross) | Sqm | 1 | 70.00 | 4.65 | | 325.50 | | |
| | 11th cross (down next to CC road) (continution of khaliamma temple) | Sqm | 1 | 73.00 | 5.20 | | 379.60 | | |
| | **BALAJI LAYOUT** | | | | | | | | |
| | 3rd main road | Sqm | 1 | 31.90 | 5.10 | | 162.69 | | |
| | Basic rate | | | | | | | 3.00 | |
| | Area weightage 6% | | | | | | | 0.18 | |
| | Total | | | | | | 2586.34 | 3.18 | 8224.56 |
| 12 | KSRRB M500-7 : Providing and applying tack coat using 80/100 grade bitumen (VG10) on prepared black topped surfaces at 2.5 Kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications.MORTH / Chapter 5 (P.No.161 I.No.21.7) | | | | | | | | |
| | **KUVEMPUNAGARA 1st STAGE** | | | | | | | | |
| | **For Road surface** | | | | | | | | |
| | kamaraja road 8th cross upto dead end | Sqm | 1 | 301.50 | 5.70 | | 1718.55 | | |
| | 12th cross upto the coconut tree (next to the 11th cross) | Sqm | 1 | 70.00 | 4.65 | | 325.50 | | |
| | 11th cross (down next to CC road) (continution of khaliamma temple) | Sqm | 1 | 73.00 | 5.20 | | 379.60 | | |
| | **BALAJI LAYOUT** | | | | | | | | |
| | 3rd main road | Sqm | 1 | 31.90 | 5.10 | | 162.69 | | |
| | Basic rate | | | | | | | 12.00 | |
| | Area weightage 6% | | | | | | | 0.72 | |
| | Total | | | | | | 2586.34 | 12.72 | 32898.24 |
| 13 | KSRRB M500-19. Providing and laying bituminous concrete 30-40 mm compacted thickness with VG30 Bitumen grade using 40-60 HMP using crushed aggregates of grading II, premixed with bituminous binder at 5.4% of mix and filler, transporting the hot mix to work site, laying with a mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MoRT&H specification clause No. 500.9 complete in all respects as per specifications. MORTH Specification No. 509 (P.No.165 of I.No.21.22.6) | | | | | | | | |
| | **KUVEMPUNAGARA 1st STAGE** | | | | | | | | |
| | kamaraja road 8th cross upto dead end | Cum | 1 | 301.50 | 5.70 | 0.04 | 68.74 | | |
| | 12th cross upto the coconut tree (next to the 11th cross) | Cum | 1 | 70.00 | 4.65 | 0.04 | 13.02 | | |
| | 11th cross (down next to CC road) (continution of khaliamma temple) | Cum | 1 | 73.00 | 5.20 | 0.04 | 15.18 | | |
| | **BALAJI LAYOUT** | | | | | | | | |
| | 3rd main road | Cum | 1 | 31.90 | 5.10 | 0.04 | 6.51 | | |
| | | | | | | | | | |
| | **Profile correction & Pot Hole Filling** | **No.*(1/2)*Length*(20%*Width)*Depth** | | | | | | | |
| | **KUVEMPUNAGARA 1st STAGE** | | | | | | | | |
| | kamaraja road 8th cross upto dead end | Cum | 1 | 301.50 | 5.70 | 0.04 | 6.87 | | |
| | 12th cross upto the coconut tree (next to the 11th cross) | Cum | 1 | 70.00 | 4.65 | 0.04 | 1.30 | | |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | 11th cross (down next to CC road) (continution of khaliamma temple) | Cum | 1 | 73.00 | 5.20 | 0.04 | 1.52 | | |
| | **BALAJI LAYOUT** | | | | | | | | |
| | 3rd main road | Cum | 1 | 31.90 | 5.10 | 0.04 | 0.65 | | |
| | Basic rate | | | | | | | 7659.00 | |
| | Area weightage 6% | | | | | | | 459.54 | |
| | Total | | | | | | **113.80** | **8118.54** | **923881.41** |
| 14 | Providing Plastic to Bituminous concrete @ 8% | | | | | | | | |
| | 8% OF BC | Kg | | 0.08 | 113.80 | 117.00 | **1065.16** | | |
| | Basic rate | | | | | | | 27.00 | |
| | Area weightage 6% | | | | | | | 1.62 | |
| | Total | | | | | | **1065.16** | **28.62** | **30484.83** |
| 15 | KSRRB M800-13.Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Bituminous Surface:- Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. (P.No.185-I.No.24.15) | | | | | | | | |
| | **KUVEMPUNAGARA 1st STAGE** | | | | | | | | |
| | kamaraja road 8th cross upto dead end | Sqm | 2 | 301.50 | 0.10 | | 60.30 | | |
| | 12th cross upto the coconut tree (next to the 11th cross) | Sqm | 2 | 70.00 | 0.10 | | 14.00 | | |
| | 11th cross (down next to CC road) (continution of khaliamma temple) | Sqm | 2 | 73.00 | 0.10 | | 14.60 | | |
| | **BALAJI LAYOUT** | | | | | | | | |
| | 3rd main road | Sqm | 2 | 31.90 | 0.10 | | 6.38 | | |
| | Basic rate | | | | | | | 512.00 | |
| | Area weightage 6% | | | | | | | 30.72 | |
| | Total | | | | | | **95.28** | **542.72** | **51710.36** |
| 16 | KSRRB M200-24. Dismantling of cement concrete pavement by mechanical means using pneumatic tools, breaking to pieces not exceeding 0.02 cum in volume and stock piling at designated locations and disposal of dismantled materials stacking serviceable and unserviceable materials seperately complete as per specifications. MORTH Specification No. 202(P.No.138- I.No.18.47) | | | | | | | | |
| | **KUVEMPUNAGARA 1st STAGE** | | | | | | | | |
| | opposite to 9th cross | Cum | 1 | 49.00 | 5.70 | 0.15 | 41.90 | | |
| | Basic rate | | | | | | | 781.00 | |
| | Area weightage 6% | | | | | | | 46.86 | |
| | Total | | | | | | **41.90** | **827.86** | **34683.19** |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 17 | KSRRB M600-1. Construction of dry lean cement concrete mix CC1:5:10 with OPC cement @160Kgs, with 25mm and down size graded granite metal coarse aggregate at 0.86cum and fine aggregates @ 0.58cum Sub- base over a prepared sub-grade with (coarse and fine aggregate conforming to IS: 383) aggregate cement ratio not to exceed 15:1. Aggregate gradation after blending to be as per Table 600-1, cement content not to be less than 160 kg/ cum, optimum moisture content to be determined during trial length construction, concrete strength not to be less than 10 Mpa at 7 days, mixed in a batching plant, transported to site, laid with a paver with electronic sensor, compacting with 8-10 tonnes vibratory roller, finishing and curing complete as per specifications.MORTH Specification No. 601, Item No. 22.1, Pg No. 176 | | | | | | | | |
| | **KUVEMPUNAGARA 1st STAGE** | | | | | | | | |
| | opposite to 9th cross | Cum | 1 | 49.00 | 5.70 | 0.15 | 41.90 | | |
| | Basic rate | | | | | | | 3761.00 | |
| | Area weightage 6% | | | | | | | 225.66 | |
| | Total | | | | | | **41.90** | **3986.66** | **167021.12** |
| 18 | Cement concrete pavement.Construction of un-reinforced plain cement concrete pavement, thickness as per design, over a prepared sub base with OPC cement or any other type as per clause 1051.2.2 design mix M20/M30 , with 25mm and down size graded granite metal coarse aggregates and fine aggregtes , with superplastisiser @3lts confirming to IS9103-1999 Reaffirmed-2008 , mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). Spreading the concrete with shovels, rackers compacted using needle, screed and plate vibrator and finished in a continuous operation including provision of contraction, expansion, construction and longitudinal joints including groove cutting charges, joint filler, separation membrane, selant primer, joint sealant, admixtures as approved, curing compound, finishing to lines and grades as per drawing complete as per specifications. - M30 (at 360Kg per cum coarse aggregate @ 0.69cum and fine aggregate @ 0.46cum) Pg No.177 Item No.22.6.1 | | | | | | | | |
| | **KUVEMPUNAGARA 1st STAGE** | | | | | | | | |
| | opposite to 9th cross | Cum | 1 | 49.00 | 5.70 | 0.15 | 41.90 | | |
| | **Sub Total** | | | | | | **41.90** | | |
| | **Consider 5% qty for camber correction** | | | | | | **2.09** | | |
| | Basic rate | | | | | | | 5866.00 | |
| | Area weightage 6% | | | | | | | 351.96 | |
| | Total | | | | | | **43.99** | **6217.96** | **273526.51** |
| 19 | KSRRB M800-13.Road Marking with Hot Applied Thermoplastic Compound with Reflectrising Glass Beads on Conrete Surface:- Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms and 2Ltr of Primer per sqm area, thickness of 2.5 mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. (P.No.192- I.No.24.57) | | | | | | | | |
| | **KUVEMPUNAGARA 1st STAGE** | | | | | | | | |
| | opposite to 9th cross | Sqm | 2 | 49.00 | 0.10 | | 9.80 | | |
| | Basic rate | | | | | | | 647.00 | |
| | Area weightage 6% | | | | | | | 38.82 | |
| | Total | | | | | | 9.80 | **685.82** | **6721.04** |
| | | | | | | | | **Sub Total** | **2443352.64** |
| | Preparation of DPR And Project management Consultancy Charges(2% of estimated cost) | | | | | | | | 50000 |
| | | | | | | | | Miscellenious and rounding | 6647 |
| | | | | | | | | **TOTAL AMOUNT** | **2500000** |
| | | | | | | | | | **RUPEES TWENTY FIVE LAKHS ONLY** |

CERTIFICATE:

1) The work spot has been inspected and found to be necessary
2) The work spot comes under B.B.M.P
3) The provisions made in the estimate are necessary and minimum
4) The estimate is based on C.S.R of 2016-2017

Assistant Executive Engineer
Vidyaranyapura Sub Division
BBMP, Bangalore - 97